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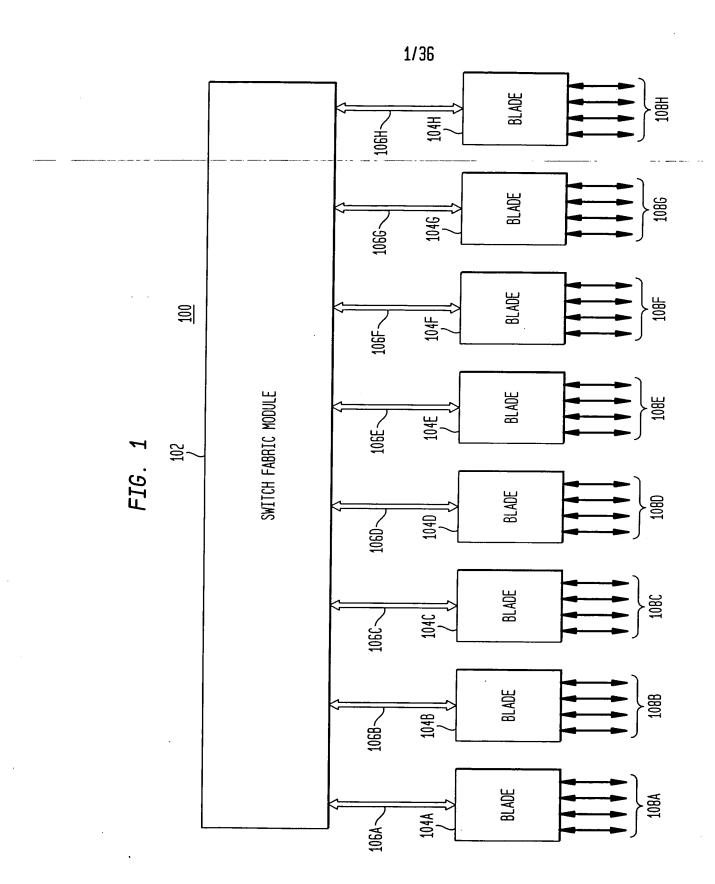
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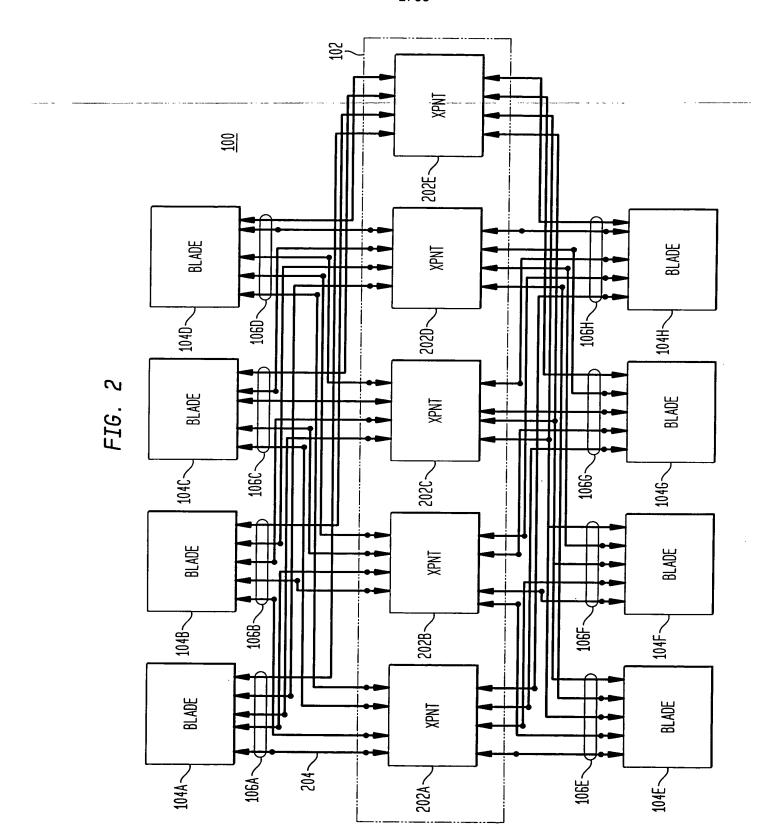
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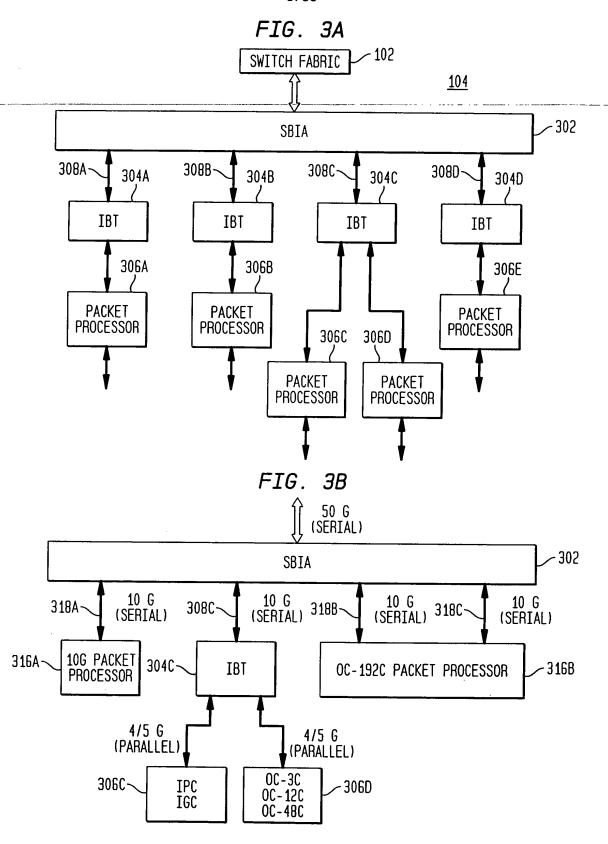


FIG. 4

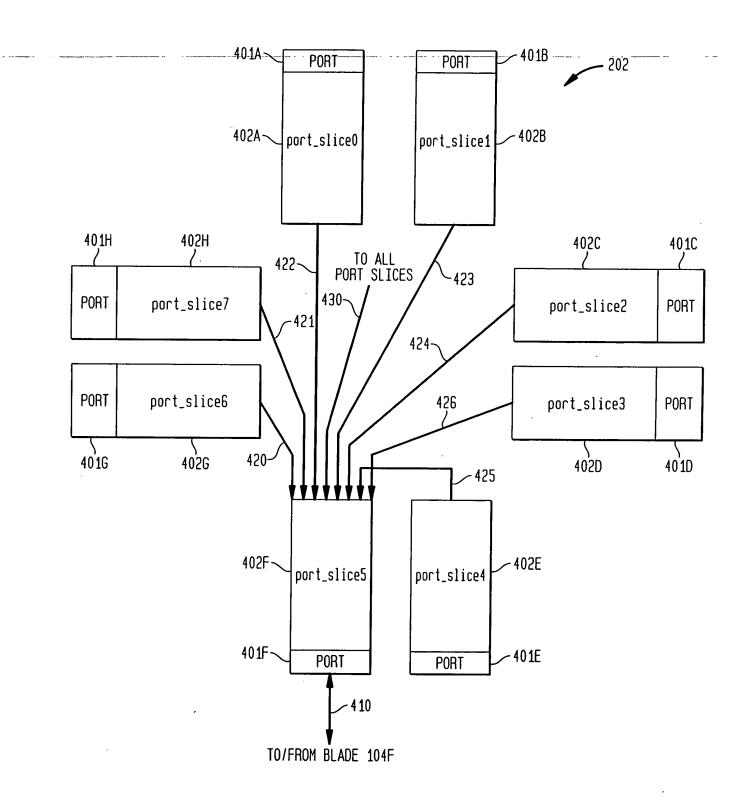
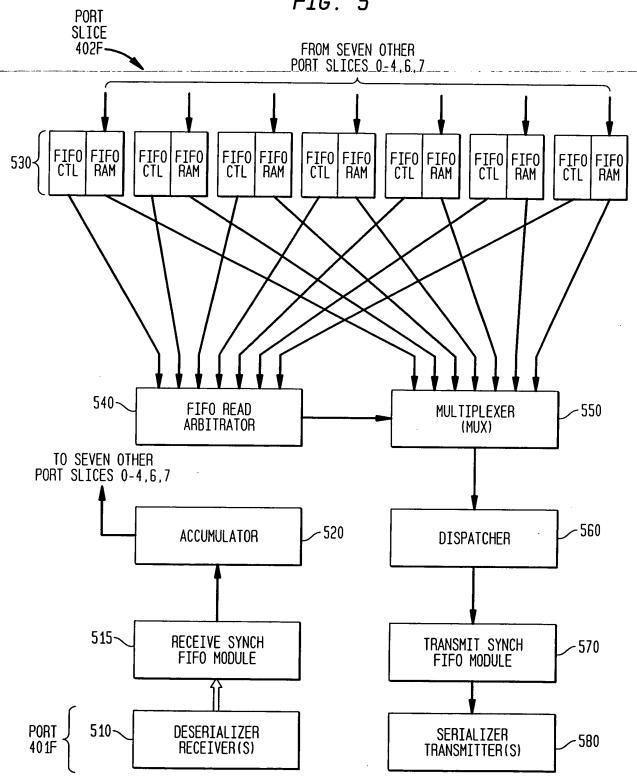


FIG. 5



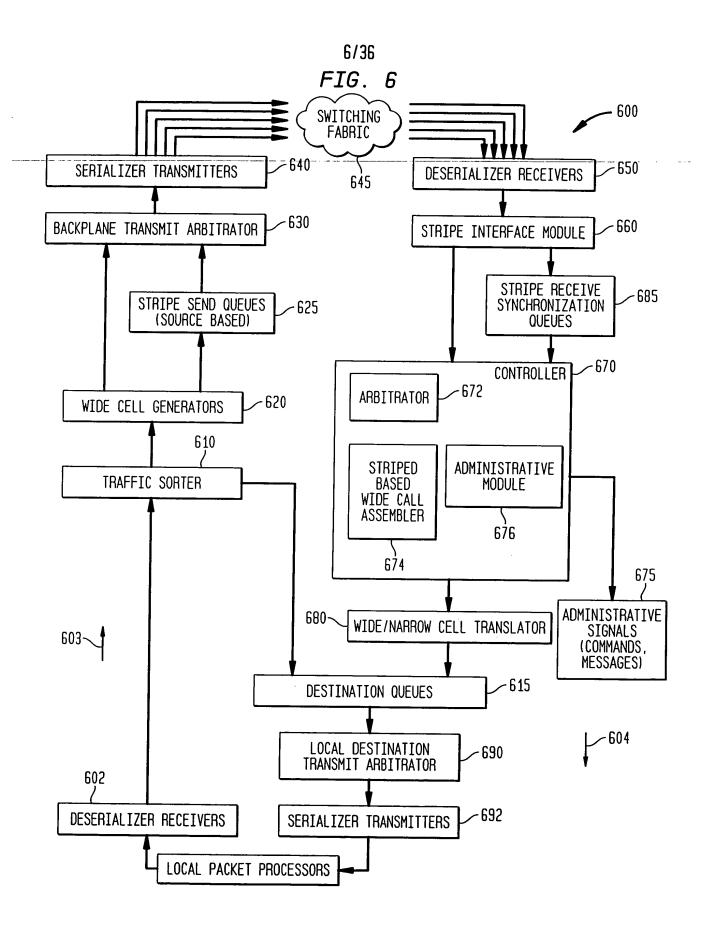
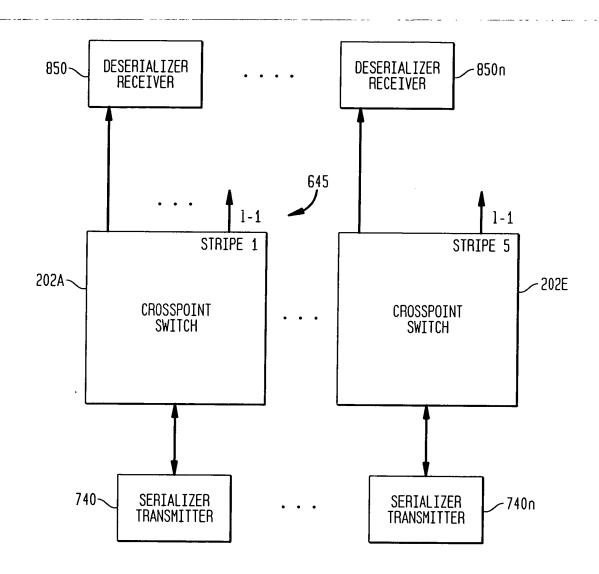


FIG. 8



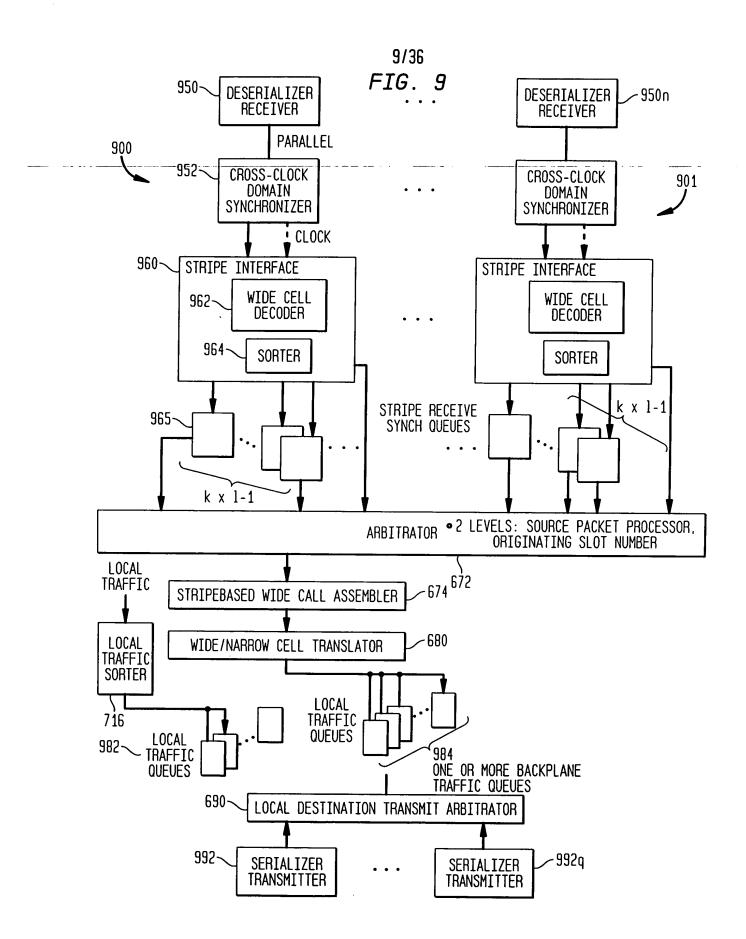


FIG. 10

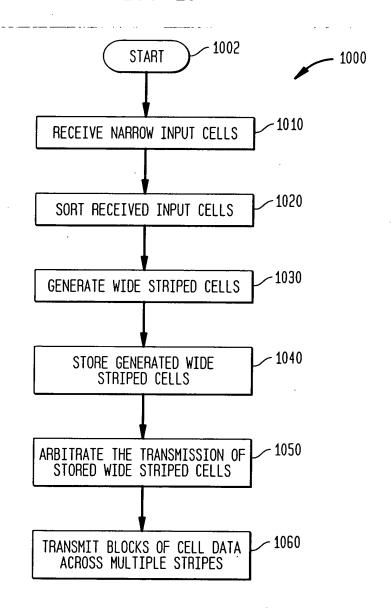


FIG. 11

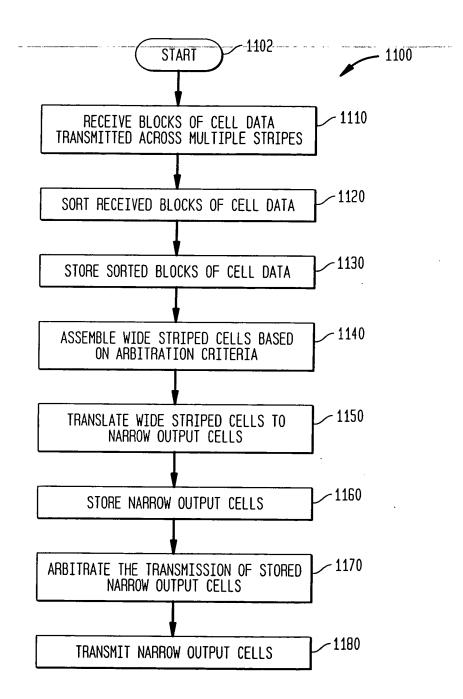


FIG. 12

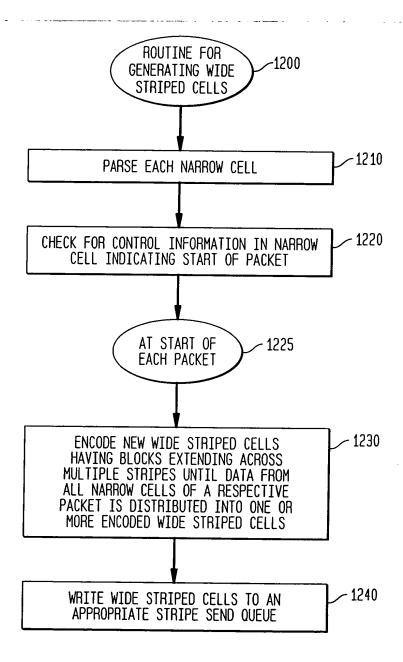


FIG. 13

| LANE_0 | LANE 1 | - LANE-2 | LANE-3 | | |
|------------------------|----------------------|----------|----------|--|--|
| CONTROL INFORMATION | STATE INFORMATION | RESERVED | RESERVED | | |
| D0 | D1 | D2 | D3 | | |
| D4 | D5 | D6 | D7 | | |
| D8 | D9 | D10 | D11 | | |
| D12 | D13 | D14 | D15 | | |
| • | • | • | : | | |
| D28 | D29 | D30 | D31 | | |

1310 —

1300

| STATE INFORMATION | | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| NAME | DESCRIPTION | | | | | | | |
| SLOT NUMBER | DESTINATION SLOT NUMBER WHERE CELL DATA BEING SENT | | | | | | | |
| PAYLOAD STATE | RESERVED, SOP, DATA, ABORT | | | | | | | |
| SOURCE OR DESTINATION PACKET PROCESSOR IDENTIFIER | ENCODED NUMBER IDENTIFYING A SOURCE OR DESTINATION PACKET PROCESSOR | | | | | | | |
| RESERVED | RESERVED | | | | | | | |

FIG. 14

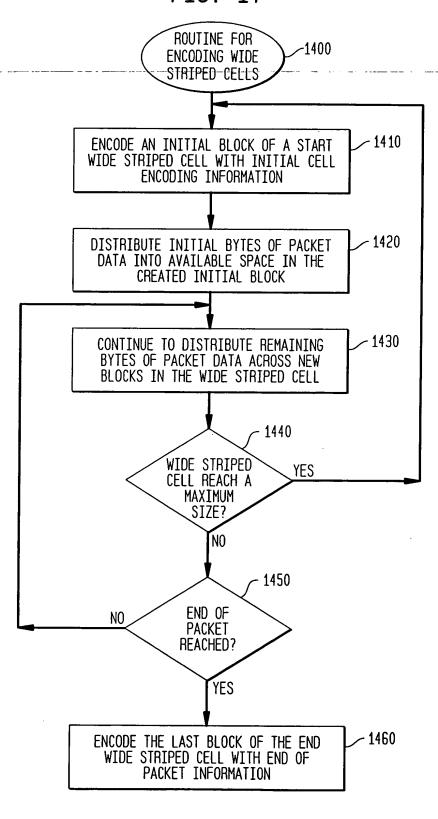


FIG. 15A

| | | STRIP | E 1 | | | STRIF | E 2 | | | STRIF | E 3 | | | STRIP | E 4 | | | STRIF | PE 5 | |
|-------|------|-------|-----|----|----|-------|-----|----|----|-------|-----|----|----|-------|-----|----|----|-------|------|------|
| CYCLE | LO | Li | L2 | L3 | LO | L1 | L2 | L3 | LO | L1 | L2 | L3 | LO | L1 | L2 | L3 | LO | Li | L2 | L3 |
| 1 | K0 | STATE | DO | D1 | K0 | STATE | D2 | D3 | K0 | STATE | D4 | DS | K0 | STATE | D6 | D7 | K0 | STATE | RES | RES |
| 2 | D8 | | | | | | | | | | | | | | | | | | | D27 |
| 3 | D28 | | | | | | | | | | | | | | | | | | | D47 |
| 4 | D48 | | | | | | | | | | | | | | | | | | | D67 |
| 5 | D68 | | | | | | | | | | | | | | | | | | | D87 |
| 6 | 088 | | | | | | | | | | | | | | | | | | | D107 |
| 7 | D108 | | | | | | | | | | | | | | | | | | | D127 |
| 8 | 0128 | | | | | | | | | | | | | | | | | | | D147 |

1500

FIG. 15B

| STATE INFORMATION | | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|--|
| NAME | DESCRIPTION | | | | | | | | |
| SLOT NUMBER | DESTINATION SLOT NUMBER FOR BIA TO CROSSPOINT SWITCH DIRECTION SOURCE SLOT NUMBER FOR CROSSPOINT SWITCH TO BIA DIRECTION | | | | | | | | |
| PAYLOAD STATE | ENCODED PAYLOAD STATE INFORMATION (RESERVED, SOA, DATA, ABORT) | | | | | | | | |
| RESERVED . | RESERVED | | | | | | | | |

FTG 15C

| 1. EOP DURING CYCLE 1 (ie. DURING TRANSMISSION OF STATE INFORMATION) 1. EOP DURING CYCLE 1 (ie. DURING TRANSMISSION OF STATE INFORMATION) 1. EOP DURING CYCLE 1 (ie. DURING TRANSMISSION OF STATE INFORMATION) NOTE THAT THE KO, STATE, AND RESERVED BYTES ARE ALL PRESERVED, AS IN ANY OTHER CYCLE 1 TRANMISSION. THE K1 CHARACTER IS TREATED AS DATA | 2. EOP DURING CYCLE n (n!=0) 1 KO state D0 D1 2 D8 3 D28 2 D9 DURING CYCLE n (n!=0) KO state D4 D5 KO state D6 D7 KO state RES RES D32 D33 K1 | 3. EOP AT BLOCK BOUNDARY DURING CYCLE n (n!=8) 1 KO state DO D1 KO state DO D7 2 D8 3 K1 | 4. EOP at cell boundary 6 088 7 0108 8 0128 8 0128 |
|---|---|--|--|
|---|---|--|--|

FIG. 15D

| | | STRI | PE 1 | | | STRI | PE 2 | | | STRI | PE 3 | | | STRI | PE 4 | | | STRI | PE 5 | |
|-------|------|------|------|------|-----|------|------|-----|-----|------|------|-----|-----|------|------|-----|-----|------|--|-----|
| CYCLE | LO | L1 | L2 | L3 | LO | L1 | 12 | L3 | LO | L1 | L2 | L3 | LO | L1 | L2 | L3 | LO | 11 | 12 | L3 |
| 1 | K0 | P1 | D0 | D1 | | | | | | | | | | | | | | | | |
| 2 | D8 | | | 011 | | | | | | | | | | | | | | | _ | |
| 3 | D28 | | | D31 | K0 | P1 | D2 | D3 | | | | | | | | | | | | |
| 4 | D48 | | | D51 | D12 | | | D15 | | | | | K0 | P1 | D6 | D7 | | | | |
| 5 | D68 | | | 071 | D32 | | | D35 | | | | | D20 | | | D23 | | | | |
| 6 | D88 | | | D91 | D52 | | | D55 | KO | P1 | D4 | 05 | D40 | | | D43 | | | | |
| 7 | D108 | | | D111 | D72 | | | D75 | D16 | | | D19 | 060 | | | D63 | K0 | P1 | RES | RES |
| 8 | D128 | | | D131 | D92 | | | D95 | D36 | | | D39 | D80 | | | D83 | D24 | | | D27 |

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FIG. 16

| | STRIPE 1 | STRIPE 2 | STRIPE 3 | STRIPE 4 | STRIPE 5 | | | |
|-------|---|----------------------|------------------------|---------------------------------|------------------------|--|--|--|
| CYCLE | | L0 L1 L2 L3 | LO L1 L2 L3 | LO L1 L2 L3 | LO L1 L2 L3 | | | |
| 1 | K8 \$81 00 DY | KO SS6 D151 D152 | KO SS2 04 05 | KO SS3 86 Q7 | KO//581/BES/RE8/ | | | |
| 2 | D8 D11 | D161 D162 D163 K1 | D16 / D19 | Q20 Q23 | 0320 / / 0323 | | | |
| 3 | D28 D31 | KO SS2 D2 03 | D36 D38 | 048 043 | 0340 / 0343 | | | |
| 4 | D48 D51 | 012 015 | 056 059 | KO SS4 D6 D7 | 0360////0363/ | | | |
| ኃ | D88 D71 | 032 035 | D76 X1 X1 X1 | DS0 DS3 | 0380 / / / 0383 | | | |
| 6 | D88 D91 | D52 D55 | KO \$53 Q4 Q5 | D40 D43 | KY/KY/KY/KY/ | | | |
| / | DIOB DITT | 072 / 075 | 910 | DEO DE3 | KO SSS PES RES | | | |
| 8 | D128 D131 | <u>KO 555 02 03 </u> | 036 039 | 080 K1 K1 K1 | 084 | | | |
| 9 | KO SSA DO DI | 015//////02 | KO SS6 D153 D154 | KO \$82 D8 D7 | DAY | | | |
| 10 | 88 011 | 032 035 052 | K1 K1 K1 K1 | 020 023 | 063 | | | |
| 11 | | | K0 | D40 D43 | KO SS1 RES RES | | | |
| 13 | D48 D51 D68 D71 | | 0312 0315 0332 0335 | D60 D63 | 021 027 | | | |
| 14 | | D12 D15 D35 | | K1 K1 K1 | 047 | | | |
| 15 | 0304 0307 | | 0357 0372 0375 | K0 SS6 D155 D156 K1 K1 K1 K1 | 064 067 | | | |
| 16 | 0321 | 077 075 | | K1 K1 K1 K1 K0 SS1 06 07 | 084 087 | | | |
| 17 | 0344 | 092 / 095 | 10 1335 PA 105 | 020 023 | 0104 0107 0124 0127 | | | |
| 18 | 0367 | oniz Diris | 016/1/1/019 | 040 043 | 0144 0147 | | | |
| 19 | W Har h | 0132 / 0135 | 036 | 060 1063 | QO SS3 RES RES | | | |
| 20 | KO SS6 D149 D150 | KO \$87 0298 0299 | 056 1/1/1/059 | 080 083 | 024 027 | | | |
| 21 | | 0309 7 7 7 0311 | KØ 7557 104 105 | | 044 045 K1 K1 | | | |
| 22 | KO SSI KI KI | 0328 / / | 016 019 | 0120 / 0123 | KO SS2 AES RES | | | |
| 23 | | 0348 0351 | | 0140 / 0143 | 024 027 | | | |
| 24 | | 0368 0371 | 056 059 | KO 887 10302 10303 | 044 / 047/ | | | |

GREEN YELLOW ORANGE BLUE RED RUST PINK

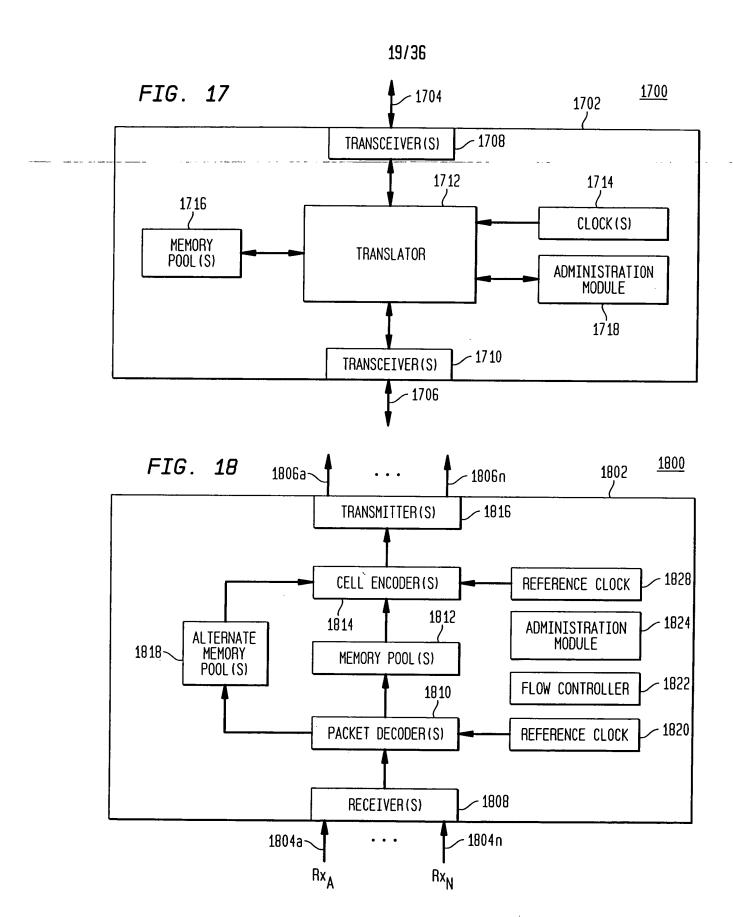
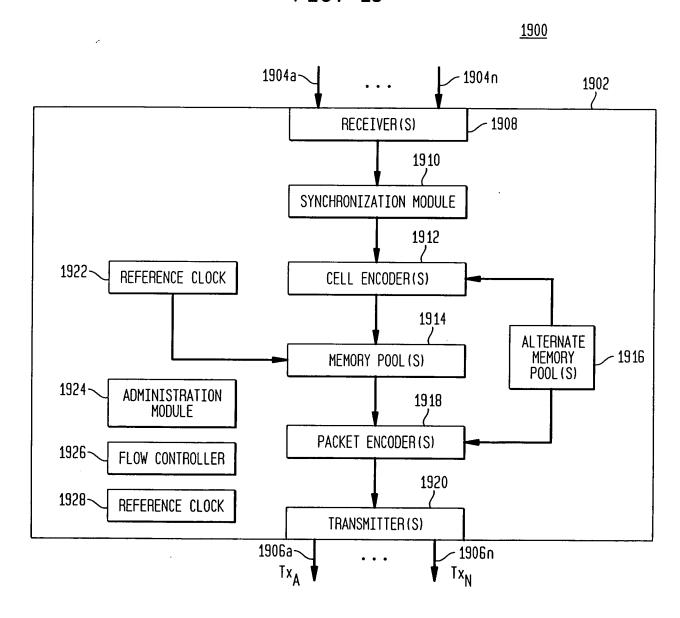
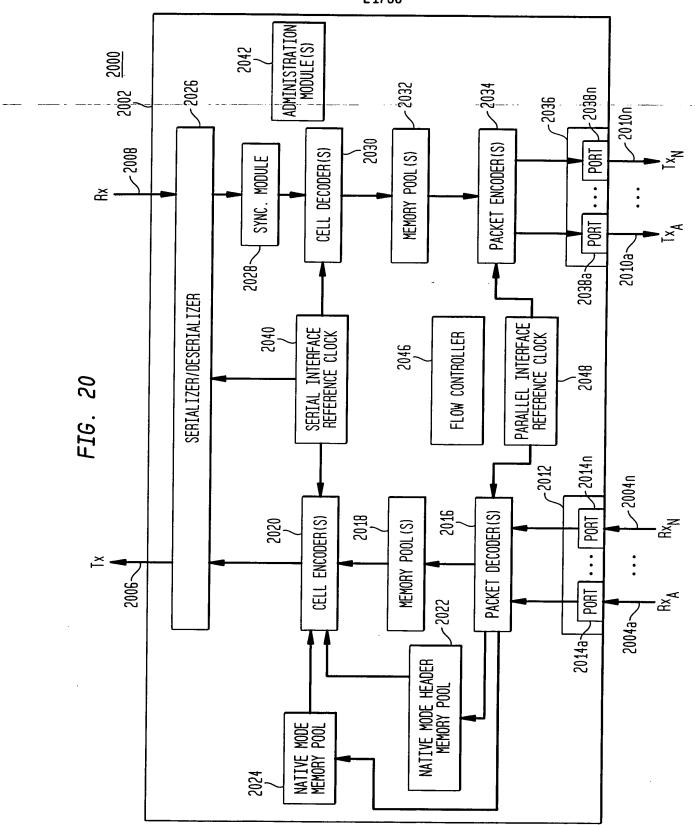
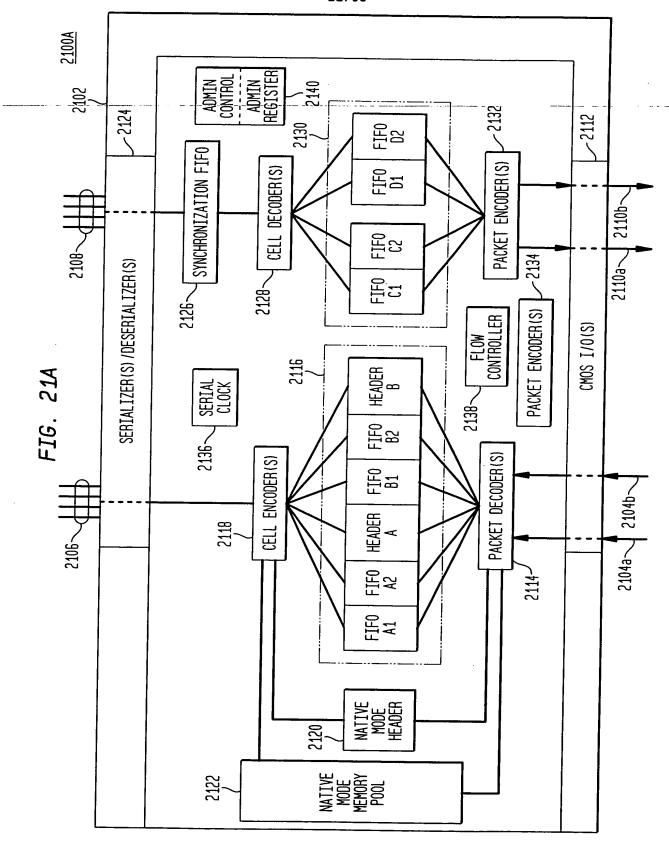


FIG. 19

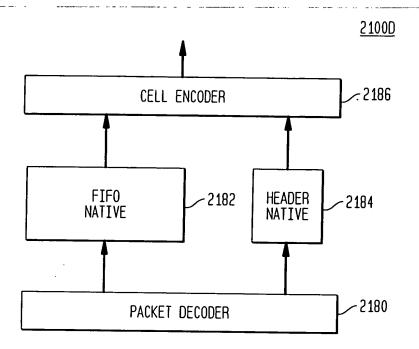






23/36 FIG. 21B 2162 2164a 2164b 2100B SER/DES_SPECIAL SER/DES-DATA SER/DES DATA CHARACTER 2160 CELL ENCODER(S) 2152a-2152b 2154 -2156b 2156a--2158 FIF0 HEADER FIF0 FIF0 FIF0 HEADER A2 **A1** A **B1** 82 В PACKET DECODER PACKET DECODER 2150a 2150b FIG. 21C 2100C 2170 2172b 2172a SER/DES SPECIAL CHARACTER SER/DES DATA SER/DES DATA 2174 CELL DECODER(S) 2176a-2176b 2176c--2156d FIF0 FIF0 FIF0 FIF0 C1 C2 D1 D2 PACKET ENCODER PACKET ENCODER 2178a 2178Ь

FIG. 21D



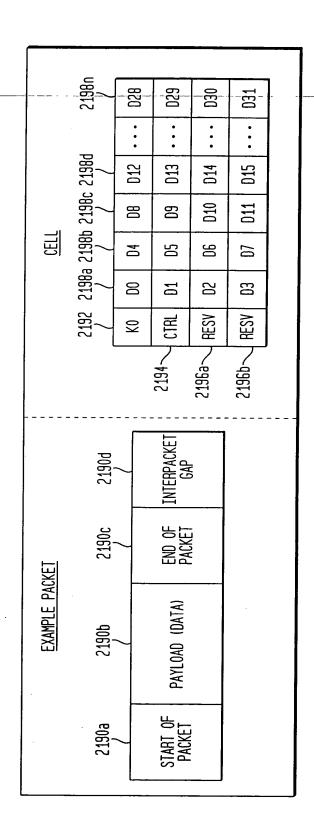
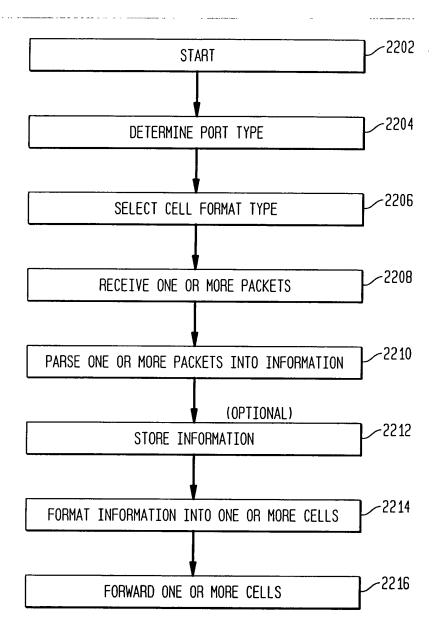
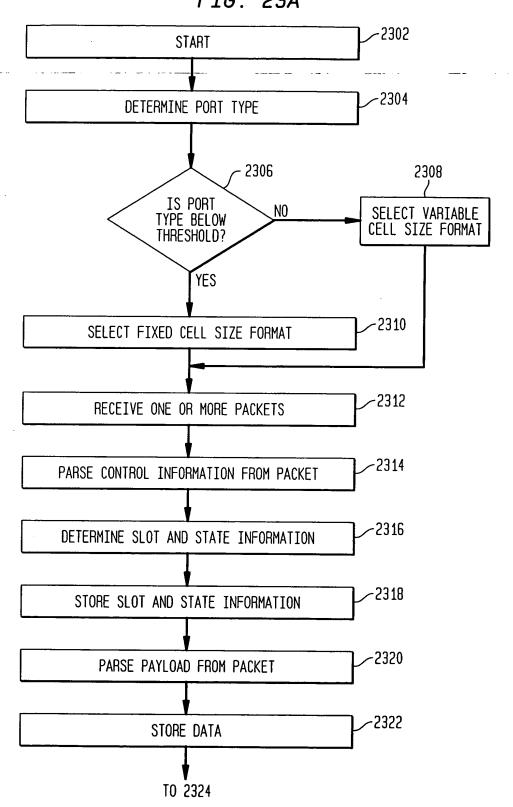


FIG. 21E

FIG. 22

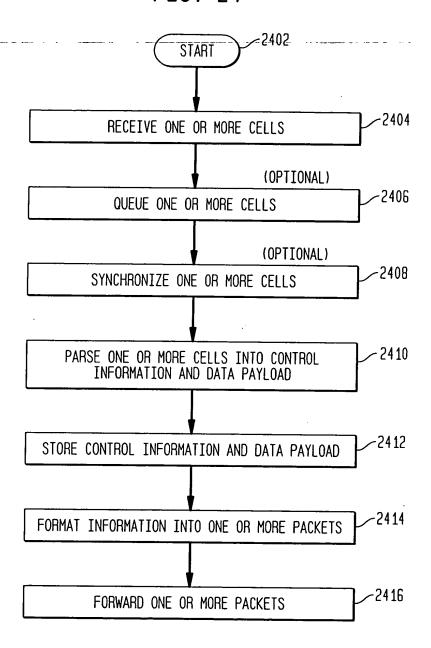


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28/36 FIG. 23B FROM 2322 -2324 ACCESS CONTROL INFORMATION ~2326 ACCESS DATA BASE ON PACKET -2328 INSERT KO SPECIAL CHARARCTERS ~2330 INSERT SLOT INFORMATION -2332 INSERT STATE INFORMATION -2334 INSERT DATA BASED ON CELL FORMAT TYPE - 2336 IS THERE REMAINING YES DATA? NO. ~2338 INSERT K1 SPECIAL CHARACTER -2340 FORWARD ONE OR MORE CELLS

FIG. 24



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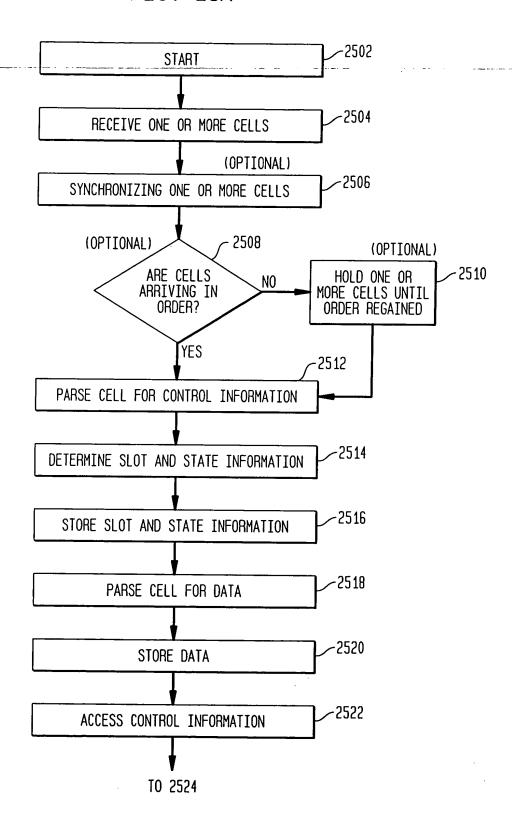


FIG. 25B

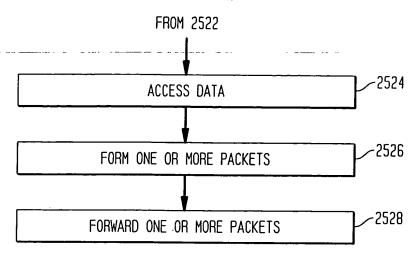


FIG. 26

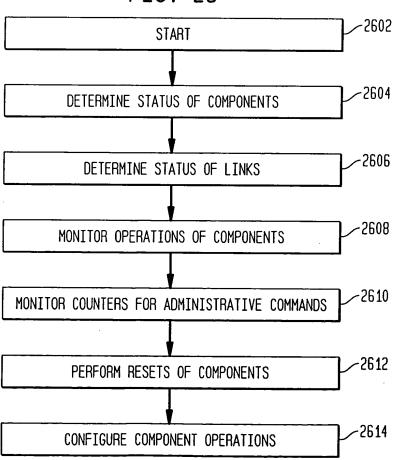
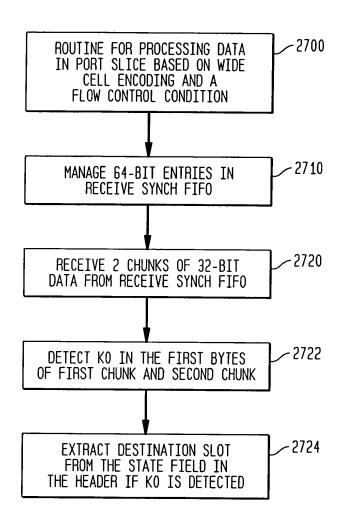
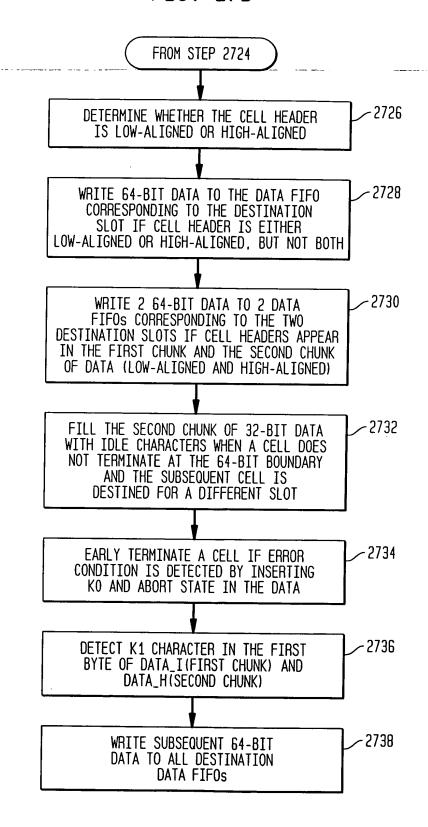


FIG. 27A



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FIG. 27B



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FIG. 27C

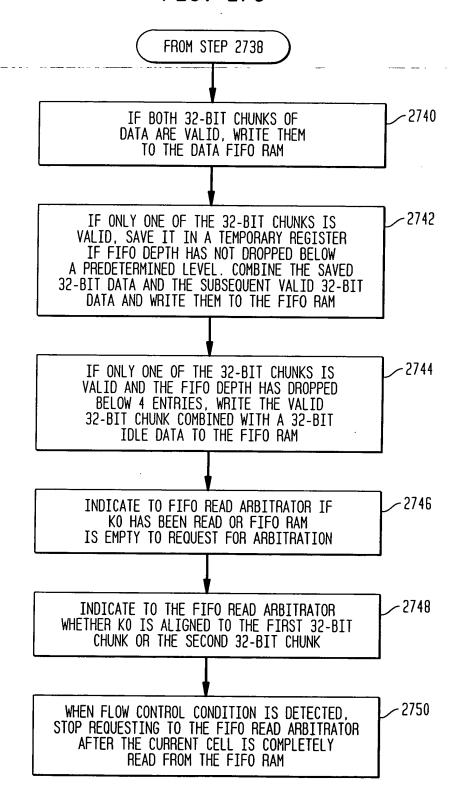
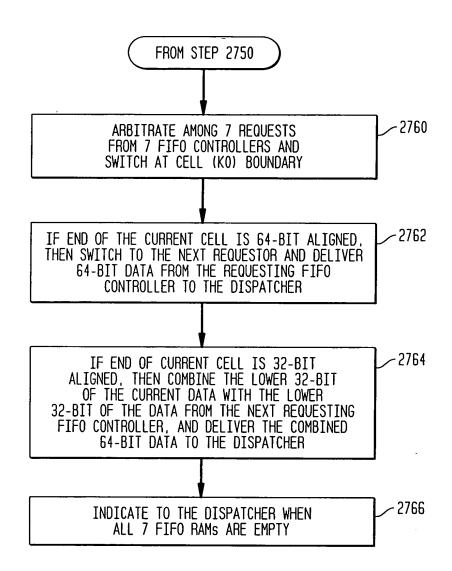


FIG. 27D



36/36 FIG. 27E

